Two imaging equipment are provided at a pair of cutting blade units, and the two imaging equipment image patterns at first positions in proximity to the center of a wafer at the same time. A controller drives drive mechanisms to align the wafer in such a way that current image patterns at the first positions can match with a reference pattern at the first positions. Then, the two imaging equipment are moved to positions for imaging patterns at second positions at the outer circumference of the wafer to image the patterns at the second positions. The controller drives the drive mechanisms to align the wafer in such a way that current image patterns at the second positions can match with a reference pattern at the second positions.